

# Mail, DNS

20.06.2011 Antonia Stank

# What do we want to do?

- Set up and configure a DNS server
- Set up and configure a mail server
- Set up an IMAP server
- Use Icedove to send mails to course members and configure the address book to connect to the LDAP server

# What is DNS?

- Domain Name System
- Comparable to a telephone book
  - www.google.de <-> 209.85.148.99
- DNS:
  - has an hierarchical structure (tree structure)
  - is easy to extend
  - Names are unique

# What to do before starting

Take some time and install some packages 😊:

- gnome-core
- xorg
- iceweasel, icedove

(without recommendations with e.g.:

`apt-get --no-install-recommends install`)

# What to do before starting

And go on...:

bind9

dnsutils

postfix (choose: Internet site,  
Host: <name>.course  
e.g. stank.course)

postfix-doc

bsd-mailx

dovecot-imapd

icedove

ca-certificates

procmail

# What to do for our DNS in the lab

Edit `/etc/bind/named.conf.local` and add

```
zone "course" {  
    type master;  
    file "/etc/bind/db.course";  
};  
  
zone "16.168.192.in-addr.arpa" {  
    type master;  
    file "/etc/bind/db.192.168.16";  
};
```

# What to do for our DNS in the lab

Edit /etc/bind/db.course

and change the IP and the name from the example and add all course members!

```
;
; BIND reverse data file for broadcast zone
;
$TTL      86400
@          IN      SOA      lkajan.course. root.lkajan.course. (
                                10051701      ; Serial
                                604800         ; Refresh
                                86400          ; Retry
                                2419200        ; Expire
                                86400 )        ; Negative Cache TTL
;
@          IN      NS       lkajan.course.

lkajan     A       192.168.16.2
<other course members>
```

```
stank      A       192.168.16.7
```

```
...
```

# What to do for our DNS in the lab

Edit /etc/bind/db.192.168.16

and change the IP and the name from the example and add all course members!

```
;
; BIND reverse data file for broadcast zone
;
$TTL      86400
@         IN      SOA      lkajan.course. root.lkajan.course. (
                                10051701      ; Serial
                                604800        ; Refresh
                                86400         ; Retry
                                2419200       ; Expire
                                86400 )      ; Negative Cache TTL
;
@         IN      NS       lkajan.course.

2         PTR      lkajan.course.
<other course members>
```

7           PTR       stank.course

...



# What to do for our DNS in the lab

- Test-load of the named configuration with:

named-checkconf -z

```
root@stank:~# named-checkconf -z
zone course/IN: loaded serial 10051701
zone 16.168.192.in-addr.arpa/IN: loaded serial 10051701
zone localhost/IN: loaded serial 2
zone 127.in-addr.arpa/IN: loaded serial 1
zone 0.in-addr.arpa/IN: loaded serial 1
zone 255.in-addr.arpa/IN: loaded serial 1
```

- Restart (bind9) and update /etc/resolv.conf  
search course  
nameserver 127.0.0.1  
...  
• Ping the name server:  
ping stank.course

# Mail server

- A server which can handle the mail traffic
- Necessary for:
  - Sending
  - Receiving
  - Forwarding
  - Saving mails

# What to do for the Mail server

- Edit `/etc/postfix/main.cf`  
`mynetworks = 127.0.0.0/8 [::ffff:127.0.0.0]/104 [::1]/128 192.168.16.7`
- Restart postfix and check the start in the logs  
(`/var/log/syslog`)
- Add root alias in `/etc/aliases` and rebuild the DB (not necessary in my case)
- Edit `~/.procmailrc` (not at root!) and add  
`#Maildir:`  
`DEFAULT="$HOME/Maildir/"`

# What to do for the Mail server

- Sending a test mail from root to you:

mail [stank@stank.course](mailto:stank@stank.course) <Enter>

Subject: Hello <Enter>

Hello,test 123

.<Enter>

CC:<Enter>

- Check log if mail was delivered

# IMAP server

- Internet Message Access Protocol
  - Access and Management of Mail server
  - Mails are saved on the server
  - Allows access by different users
- > nothing to do for us (dovecot necessary)

# What to do for Icedove

## E-mail Program like Thunderbird

- Use a VNC connection to start icedove
- Configure a new mail server
  - Email address: <username>@<hostname>.course
  - Type: IMAP
  - Incoming server: <hostname>.course or 127.0.0.1
  - Outgoing server: <hostname>.course or 127.0.0.1

# What to do for Icedove

Configure LDAP:

Preferences -> Composition -> Addressing ->  
Directory server -> Edit directories -> Add:

```
Hostname: localhost  
Base DN: dc=course  
Port n: 389  
Bind DN: uid=<username>, ou=people,dc=course
```

Send an email to another course member with  
Icedove 😊!

# Procmail recipes

```
#Maildir:
DEFAULT="$HOME/Maildir/"
```

```
#Recipie exam & work
```

```
:0
* !^FROM_DAEMON
* !^X-Loop: stank@stank.course
* ^Subject:.*(exam)+.*(work)+
| (formail -rt -A"X-Loop: stank@stank.course"; \
  echo "I am ill!"; \
) | $SENDMAIL -t
```

```
#Recipie exam & work
```

```
:0
* !^FROM_DAEMON
* !^X-Loop: stank@stank.course
* ^Subject:.*(work)+.*(exam)+
| (formail -rt -A"X-Loop: stank@stank.course"; \
  echo "I am ill!"; \
) | $SENDMAIL -t
```

```
#Recipie work
```

```
:0
* !^FROM_DAEMON
* !^X-Loop: stank@stank.course
* ^Subject:.*(work)+
| (formail -r -A"X-Loop: stank@stank.course"; \
  echo "I am busy learning for an exam"; \
) | $SENDMAIL -t
```

```
#Recipie exam
```

```
:0
* !^FROM_DAEMON
* !^X-Loop: stank@stank.course
* ^Subject:.*(exam)+
| (formail -r -A"X-Loop: stank@stank.course"; \
  echo "I am busy working"; \
) | $SENDMAIL -t
```

Use man pages of procmailrc or procmailx  
<http://www.perlcode.org/tutorials/procmail/proctut/proctut1.pod>